WELFARE DATA TRACKING IMPLEMENTATION PROJECT

USER ACCEPTANCE TEST SIGN-OFF

1. Project Overview

This section provides an overview of the Welfare Data Tracking Implementation Project (WDTIP), delineating project definition, purpose, objectives and scope to provide the reader with the context for decisions regarding the approval of User Acceptance Test (UAT) activities.

1.1 Project Definition

The WDTIP is a system development project that includes overall project management; designing, building and testing the system; developing and executing user training; communicating with internal and external stakeholders; and deploying the system. In addition, data will be converted from county systems to the WDTIP database. It is anticipated that this data conversion will entail both automated and manual methods. Subsequent ongoing batch data loads from the counties are also included in the WDTIP. WDTIP scope is detailed in the ***1.2 Project Scope*** subsection below.

In response to the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996, the State of California passed Assembly Bill (AB) 1542. AB-1542 institutes the Temporary Assistance to Needy Families (TANF) program in California and imposes welfare time limits, as well as new programmatic and eligibility rules. In addition to welfare time limits, AB-1542 mandates work requirements through the California Work Opportunity and Responsibility to Kids (CalWORKs) program. As a result of the CalWORKs program, county welfare departments are required to have a mechanism to track eligibility time limits, and other related data on an individual level, across counties and over time to comply with the tracking requirements of both State and Federal mandates.

The purpose of the WDTIP is to provide a communication mechanism and central data repository that can be accessed by all technology-enabled counties and relevant agency systems to meet the requirements of TANF and CalWORKs legislation. WDTIP addresses the immediate need for Federal and State Welfare Reform tracking functions imposed by the Federal PRWORA, AB-1542 and relevant All County Letters (ACLs) issued by the California Department of Social Services (a list of these ACLs is included in as ***Appendix 1-1*** in the **Implementation Plan** deliverable).

The WDTIP objectives are to satisfy the aforementioned legislative requirements by providing an automated statewide repository for Welfare Reform data elements and to facilitate communication between disparate county welfare and statewide welfare-related systems. The primary data to be collected, calculated (if necessary), and tracked for applicants/recipients includes:

- TANF 60-month clock
- CalWORKs 60-month clock
- Welfare to Work 18/24-month clock

1.2 Project Scope

The overall objective of the WDTIP is to provide a communication mechanism and central data repository that can be accessed by all technology-enabled counties and relevant agency systems. In addition, the WDTIP system must enable counties to meet the requirements of Welfare Reform. The scope of the WDTIP includes design, construction, testing and implementation of the WDTIP system. This system will enable all 58 California counties to accurately track individual welfare recipient information to meet the requirements of both State and Federal Welfare Reform. WDTIP is also tasked with development of Customer Information Control System (CICS) screens that will provide counties with the ability to view data, perform inquiry and online updates and create management reports.

In addition to the WDTIP system development tasks listed above, the WDTIP is responsible for conducting a one-time data conversion of county data. This one-time conversion will be required for the initial county data load into the WDTIP database. The counties will perform subsequent ongoing data loads. Examples of data to be tracked in the WDTIP system include:

- PRWORA time clock calculation
- CalWORKs time clock calculations, including exceptions and exemptions
- Diversion program and payment information
- Sanction information to provide appropriate CalWORKs sanction data across counties

The data conversion of county data to populate the WDTIP database will be a vital component of the WDTIP. Some counties have not maintained the level of historical data necessary to provide the initial county-specific information required for optimal time clock calculations. In addition to this, because the Medi-Cal Eligibility Data System (MEDS) does not supply all the needed data, the SAWS Information System (SIS) could not provide complete data tracking or correctly calculate cumulative time-on-aid. To accurately calculate timeclock data, the WDTIP database must be populated with direct county data via a one-time data conversion and ongoing updates.

The WDTIP Team (with input from the counties) developed conversion specifications and standard file formats that will support each county's conversion and update efforts. Each county will now be responsible for providing the conversion data files to populate the WDTIP database. It is expected that counties or their consortium will provide WDTIP with ongoing data files. County technical resources will be needed to produce the conversion extract. It is important that all counties participate in this conversion effort for the WDTIP system to generate complete, accurate and meaningful data.

It is expected that the quality of the county data and the resulting time clock calculation will improve as counties begin using the WDTIP system to collect and maintain the required time tracking data elements. The scope of WDTIP includes assisting the

counties with the following data conversion activities: design, development, testing and implementation of conversion programs including, but not limited to, the following:

- Identification of required county data elements to populate the WDTIP database (completed)
- Identification of county file format requirements (completed)
- Development of edit and error processing rules (completed)
- Development of ongoing load requirements for county data into the WDTIP database (completed)
- Assistance with the one-time initial data conversion
- Assistance for the county technical resources when developing the data extract requirements

In addition, the WDTIP is responsible for the following implementation activities:

- Regional information sessions (completed)
- Regional training sessions
- County visits as needed
- Consistent communication with stakeholders
- Implementation support

The scope of the WDTIP does not include:

- Providing counties with resources to convert county data into the standard file (for initial data conversion and ongoing data loads)
- Assisting agencies/counties with the design and development of county-specific welfare screens to view WDTIP data
- Developing or managing changes to the Statewide Client Index (SCI) application

2. Acronyms and Definitions

The table below provides a list of commonly used acronyms within this document.

Table 2-1: UAT Acronyms

Acronym	Phrase/Name
AB	Assembly Bill
ACL	All County Letter
CalWORKs	California Work Opportunity and Responsibility to Kids
CCB	Change Control Board
CDSS	California Department of Social Services
CICS	Customer Information Control System
CIN	Client Identification Number
HHSDC	California Health and Human Services (Agency) Data Center
ISAWS	Interim Statewide Automated Welfare System
JRP	Joint Requirements Planning
LEADER	Los Angeles Eligibility, Automated Determination, Evaluation and Reporting (System)
MEDS	Medi-Cal Eligibility Data System
PRWORA	Personal Responsibility and Work Opportunity Reconciliation Act
PTS	Project Tracking System
SAWS	Statewide Automated Welfare System
SCI	Statewide Client Index
SIS	SAWS Information System
SME	Subject Matter Expert
SSN	Social Security Number
STS	Scenario Tracking System
TANF	Temporary Assistance for Needy Families
UAT	User Acceptance Test
WCDS	Welfare Case Data System

Acronym	Phrase/Name
WDTIP	Welfare Data Tracking Implementation Project
WTW	Welfare to Work

The table below provides definitions of potentially unfamiliar terms and phrases used throughout this document.

Table 2-2: UAT Definitions

Term or Phrase	Definition
Acceptance Criteria	Criteria identified by CDSS outlining acceptable UAT results.
Batch	An automatic process that happens within the WDTIP system on a predetermined schedule.
CalWORKs 60-Month Time Clock	A calculation of the maximum period of time an individual is allowed to receive benefits under the State CalWORKs Program. This clock began to tick in January 1998.
Clock Roll	A particular time clock advancement designed to coincide with a testing script or step.
County/Consortia	Refers to the eight core systems that will be used for the initial direct county data loads as well as the ongoing data loads. Representatives from these counties/consortia have been solicited for assistance throughout the duration of the WDTIP Project, including UAT Team participation.
Cycle	The performance of the complete set of testing scenarios.
Data Load	The process of entering data into the WDTIP system using a daily or monthly batch.
Enhancement	Any incident that is outside the project's scope. An enhancement is subject to the established protocol of the Configuration Control Process.
Fail	The status of a script that has not been signed-off by one or more members of the UAT Team because actual results do not meet expected results.
Federal/State Time Clocks	The time clocks that will be calculated and tracked in the WDTIP system: the Temporary Assistance to Needy Families (TANF) 60-month time clock, the California Work Opportunity and Responsibility to Kids (CalWORKs) 60-month time clock and the Welfare to Work (WTW) 18/24-month time clock.

Term or Phrase	Definition
Fix	Any incident that is within the project's scope. Fixes have been documented in the appropriate tracking system and assigned to the appropriate programmer to make the necessary adjustments to the affected system programs.
Incident	An incident occurs when the actual result of one or more steps in a script differs from the script's expected results or when system functionality differs from user expectations.
Project Tracking System (PTS)	A system written in Microsoft Access to track WDTIP system incidents, issues and change requests
Initial Data Load	The initial population of the WDTIP database with historical SAWS Information System (SIS), Medi-Cal Eligibility Data System (MEDS), and direct county data.
Inquiry	The ability to view information in the WDTIP system without the ability to update it.
Log-on ID	A password protected identification used to access the WDTIP system.
Online	The WDTIP system screens where welfare-related information is displayed for the user.
Pass	The status of a script that has been tested by each member of the UAT Team and all members have found that actual results meet expected results.
Pending	A script that has not been classified as pass or fail because the Team is waiting for an action to occur before the script can be fully tested (e.g., the Team is awaiting specific MEDS logons).
Regression Testing	Testing of a representative sample of scripts to not only ensure that a correction to the system has been successful but also to ensure that no other functionality was affected.
Retesting	A complete round of testing all scripts after the initial round is completed.
Scenario	A set of scripts used to test a focus area of the WDTIP system.
Scenario Tracking System (STS)	A system developed in Microsoft Access which tracks the test dates and test results of scenarios, scripts and steps.
Script	A scenario component consisting of multiple steps designed to test a specific area.
Script Sign-off	Formal written acceptance by the UAT tester of the WDTIP functionality contained within the tested script.
Step	A specific procedure within a script.
Subject Matter Expert (SME)	An individual with an intimate knowledge of welfare regulations and procedures.
System	The WDTIP system.

Term or Phrase	Definition
System Test	Performing scenarios which test all WDTIP system functionality and processing.
TANF 60-Month Time Clock	A calculation of the maximum period of time an individual is allowed to receive benefits under the Federal TANF Program. In California, this clock began to tick in December 1996.
Time Clock Advancement	Adjusting the date within the WDTIP system to simulate a future point in time.
UAT Incident Identification Form	A form that will be used by the UAT Team to record any incident that is discovered during the testing process.
UAT Team	A group of 12 individuals representing the State and the eight source systems for the purpose of UAT testing activities.
Update	The ability to enter information into the WDTIP system that will be stored and used to calculate time clocks.
User Acceptance Test (UAT)	The process by which representative users test the system screens, navigation and functionality.
WDTIP Database	The database which will support the WDTIP system and be populated with historical SIS, MEDS, and direct county data.
WDTIP System	The system that is being developed to accept direct county data, calculate the Federal and State time clocks and display the resulting information.
WTW 18/24-Month Time Clock	A calculation of the maximum period of time an individual is allowed to receive benefits under the State WTW Program. This clock begins to tick when the individual recipient signs or refuses to sign a WTW Plan.

3. Introduction

3.1 Document Objective

The **User Acceptance Test Sign-off** deliverable provides a summary of the approach taken during UAT activities as well as a comprehensive description of the findings identified during user acceptance testing of the WDTIP system. The document defines the purpose of UAT, describes the procedures followed during testing and addresses the acceptance criteria. In addition, the document outlines the results of UAT by providing the incidents identified during testing and by addressing the status of each. The document also addresses script sign-off by UAT participants, including the California Department of Social Services (CDSS).

3.2 Document Purpose

The purpose of the **User Acceptance Test Sign-off** deliverable is to provide a description of our approach to UAT and an overall summary of user acceptance activities and to document the findings compiled during user acceptance testing. UAT activities refer to those activities that must be completed in order for the UAT participants (county/consortia and CDSS representatives) to validate and the CDSS to accept the WDTIP system functionality (as it was designed) and ease of use as they pertain to the user's business needs.

3.3 Document Scope

The **User Acceptance Test Sign-off** deliverable includes the following information:

- ***Project Overview*** – This section contains a brief overview of the project and its scope.
- ***Acronyms and Definitions*** – This section provides two reference tables, a list of commonly used acronyms and a list of definitions for potentially unfamiliar terms and phrases used throughout this document.
- ***Introduction*** – This section contains the objective, purpose and scope of this document.
- ***UAT Overview*** – This section describes the purpose of UAT, provides a list of the UAT participants, provides an overview of the approach taken, describes the testing cycles and addresses the acceptance criteria.
- ***UAT Results –*** This section provides the results of UAT and discusses how these results compare to the acceptance criteria developed and included with the UAT Plan section of the **Integration/System Test Sign-off** deliverable. This section includes UAT results by testing cycle, a detailed subsection on the incidents identified during UAT and outlines the script and UAT sign-off process.

4. UAT Overview

4.1 UAT Purpose

For the purposes of WDTIP, UAT is defined as the process by which representative users (from the counties and from the State) test the system screens, navigation and functionality (accurate time clock calculations, reports development, security, etc.).

Accordingly, the purpose of user acceptance testing was to validate the functionality and general use of the WDTIP system as it pertains to the users' business needs. As a result, UAT was planned and executed to ensure that the testing scripts were developed in accordance with the business requirements outlined in the **Updated Business Requirements** document and covered all functional areas. The UAT Team consisted of representatives from the eight systems from which data will be converted, as well as from CDSS. (Please see the ***4.2.1, UAT Team*** subsection for a list of the eight systems.) Specifically the UAT Team was charged with validating that the system:

- Met the business needs of the user
- Calculated the TANF 60-month, CalWORKs 60-month and WTW 18/24-month time clocks accurately
- Operated effectively within the county environment
- Allowed users to update (add, delete and/or modify) specific information on the four update screens
- Displayed information correctly
- Produced correct report files
- Was generally easy to use, including the ease of navigation throughout the system

4.2 UAT Approach

Although the most comprehensive UAT would require participation from county/consortia and CDSS representatives from planning through execution to documentation of results, the WDTIP Team had to work within specific resource constraints. To mitigate these constraints, the WDTIP UAT approach was based on incorporating representative system users (the UAT Team) to participate in the validation of scripts and testing of the WDTIP system screens, navigation and functionality while addressing the anticipated limited availability of these individuals. For instance, instead of having the UAT Team actually write the scripts used to test the system, WDTIP Subject Matter Experts (SMEs) drafted the scripts and the UAT Team validated, revised and supplemented the already drafted scripts. This required less time of the UAT Team and allowed them an opportunity to verify and validate the work of the SMEs. For the purposes of the WDTIP Project, SMEs are WDTIP Team members who have experience in welfare and who possess an intimate knowledge of welfare regulations and procedures.

The UAT strategy and approach were detailed in the ***UAT Plan*** section of the **Integration/System Test Sign-off** deliverable and include complete information on

scenarios and scripts, the UAT Team, facilities and equipment, the UAT database region, data developed and used for testing, criteria used for the acceptance of UAT, and testing/retesting and regression testing of the WDTIP System.

This subsection describes the final approach used and highlights deviations made from the original UAT Plan. Specifically, this subsection includes:

- UAT Team
- Scenarios and Scripts
- UAT Schedule
- UAT Overview, Script Validation and Training
- Testing/Retesting and Regression Testing
- Incident and Scenario Tracking and Reporting UAT Status

4.2.1 UAT Team

To meet the objectives of UAT, which was to validate that the WDTIP system met the business needs of system users, representative users were solicited to participate in testing. The WDTIP Team requested that one county and/or consortia representative from each of the eight systems from which data will be converted and two CDSS representatives participate in UAT activities. Therefore, this Team would include representatives from the following:

- California Department of Social Services (CDSS)
- Los Angeles County (representing LEADER)
- Merced County
- Riverside County
- San Bernardino County
- San Joaquin County (representing ISAWS)
- Stanislaus County
- Ventura County
- Yolo County (representing WCDS)

When soliciting participation, the WDTIP Team requested that individuals have specific qualifications and that they be able to participate for all UAT activities: Script Validation and UAT Overview and Training; Remote Testing; and finally Testing/Retesting and Regression Testing. Please see the ***5.6 UAT Team*** subsection of the ***UAT Plan*** (a section of the **Integration/System Test Sign-off** deliverable) for more information regarding requests for UAT participants.

The following table depicts actual participant involvement throughout the three stages of UAT. Please see ***Appendix 4-1 – Final UAT Roster*** for the final roster.

Table 4-1: UAT Team Participation by Stage

County / State Agency	Number of Participants		
	Script Validation	Remote Testing	Testing/ Retesting
California Department of Social Services	3	None	3
Los Angeles County (representing LEADER)	1	1	1
Merced County	1	None	None
Riverside County	2	2	1*
San Bernardino County	1	1	1
San Joaquin County (representing ISAWS)	1	1	1
Stanislaus County	2	None	1
Ventura County	1	1	1
Yolo County (representing WCDS)	1	1	1

*This number represents one participant for one of the nine days of testing/retesting and regression testing.

Although we achieved full representation from all eight source systems and almost full participation for the three stages, there were some small gaps that are explained below.

Script Validation and UAT Overview/Training – Full participation.

Remote Testing – Stanislaus County and Merced County were unable to participate in remote testing as their county systems do not allow access to the MEDS Acceptance Test environment (CICSO region) from their system terminals and these counties do not have access to stand alone MEDS terminals. To obtain access to the testing region, each of these counties would have had to reconfigure their system's MEDS connection to allow a user to select the MEDS environments they wish to access (e.g., UAT vs. production). After discussion, WDTIP Project Management decided an adequate test could be performed without the participation of these two counties. Therefore, these counties did not participate in the remote testing activity. Additionally, because the objective of remote testing was to ensure that counties had access to the system from their local sites and that the system performed as expected at these sites, CDSS did not participate in remote testing.

Testing/Retesting and Regression Testing – During the testing/retesting and regression testing activities, Merced County was unable to participate and Riverside County was limited to one of the nine days.

4.2.2 Scenarios and Scripts

Scenarios and scripts are tools that were used by the UAT Team to test the system. Scenarios focus on specific functional areas of the system and are comprised of individual scripts. Scripts represent typical welfare business situations to be tested as well as step-by-step instructions to guide a tester through the script. Scripts also provide the expected results of each step taken so that the tester can verify that the system functions

and displays information correctly. Scripts have been designed to test variables that may be encountered when using the system.

Scenarios and their scripts were developed to cover the most common situations that users encounter while performing their duties in a real-life situation. Scenarios and scripts used for UAT were developed specifically by SMEs to test the system from a user's perspective and were developed to ensure that the UAT Team was given the opportunity to conduct an adequate test of the system within the timeframe scheduled. Therefore, the objective was to ensure that the testers, once they completed validation and testing all of the UAT scenarios and associated scripts, would be confident that the system functioned as it was designed.

The table below depicts the final number of scripts that were executed by the 14 different scenarios.

Table 4-2: Scripts by Scenario

Scenario Number	Scenario Name	Number of Scripts
1	System Navigation	4
2	Security	3
3	Individual Inquiry	2
4	Program Participation	2
5	Diversion	4
6	Child Support Reimbursement	2
7	Supportive Services	3
8	WTW Plan	9
9	Time Clocks	51
10	Non-California Participants	6
11	Reports	2
12	File Extract Loads	4
13	Conversion	2
14	Remote Testing	4
	Total Scripts	**98**

4.2.2.1 System Functions

In addition to testing the overall business functionality of the system, the UAT Team was also given the opportunity to test other system functions such as:

- **Security** – each of the UAT Team members were given two different log-on IDs to test the update verses inquiry access
- **Daily Batch Runs** – simulation of the daily batch process was executed to allow for processing data entered into the system via the update screens by the testers

- **Time Clock Advancements** – time clocks were advanced or "rolled forward" to allow for the adequate test of time clock calculations

For more information on how these functions were incorporated into scripts and the planning of UAT, please see the ***5.5. Scenarios and Scripts*** subsection of the ***UAT Plan*** (a section of the **Integration/System Test Sign-off** deliverable). For more information on how these were executed, please see the ***4.3 Testing Cycles*** and ***5.1 UAT Results by Cycle*** subsections.

4.2.3 UAT Schedule

The following table depicts the schedule of activities for UAT and their corresponding dates or timeframes. These activities are broken down into three stages: Prepare for UAT (which includes remote testing), Conduct UAT and Summarize UAT Results.

Table 4-3: Milestone Schedule

Task	*Responsible Party*	*Timeframe*
Stage 1 – Prepare for UAT		
Draft Test Scenarios and Scripts	Subject Matter Experts Implementation Team	February 2000 – March 3, 2000
Secure Testing Facilities	Implementation Team	February 2000 – March 3, 2000
Identify and Confirm UAT Team	UAT Lead Counties/Consortia	February 2000 – March 3, 2000
Provide UAT Team with Draft Scenarios and Scripts	Implementation Team	March 3, 2000
Prepare Testing Region and Generate Data	Application Team Implementation Team	February 2000 – April 7, 2000
Review Scenarios and Scripts	UAT Team	March 7, 2000 – March 21, 2000
Prepare Testing Facilities	Implementation Team Application Team	March 27, 2000 – April 7, 2000
Validate Scenarios and Scripts	UAT Lead UAT Team	March 28, 2000
Provide Overview and Train the UAT Team	UAT Lead Implementation Team	March 29, 2000
Conduct Remote Testing	UAT Team Implementation Team	April 5, 2000

Task	*Responsible Party*	*Timeframe*
Stage 2 – Conduct UAT		

Task	*Responsible Party*	*Timeframe*
Test the System/Log Incidents and Issues	UAT Team Application Team Implementation Team	April 10-12, 2000
Fix Incidents and Resolve Issues	Application Team WDTIP Management	April 10-17, 2000
Retest the System	UAT Team Application Team Implementation Team	April 13-17, 2000
Conduct Regression Testing	UAT Team Application Team Implementation Team	April 18-19, 2000
Debrief and Prioritize Incidents	UAT Lead	April 20, 2000

Task	*Responsible Party*	*Timeframe*
Stage 3 – Summarize UAT Results		
Summarize UAT Results/Develop **User Acceptance Test Sign-off** Deliverable	UAT Team Implementation Team	April 17-28, 2000

4.2.4 UAT Overview, Script Validation and Training

During the UAT Team's first visit to Sacramento (March 28-29, 2000), the WDTIP Implementation Team provided a UAT overview, conducted a facilitated session for the validation of scenarios and scripts (see below), and trained the UAT Team on the WDTIP system.

4.2.4.1 Scenario and Script Validation

To ensure that scripts provided an adequate test and accurately reflected the design of the system, the scripts were developed by SMEs, further reviewed and revised by additional SMEs, reviewed by WDTIP technical experts and State staff, and finally, validated by the UAT Team. To validate these scripts, the UAT Team reviewed original drafts prior to testing, revised some of the expected results and even supplemented the scripts by requesting an additional script. Once they were comfortable with the accuracy and comprehensiveness of the scripts, the scripts were finalized by the WDTIP Team and accepted by the UAT Team.

For a copy of the final scripts, please see ***Appendix 4-2 – Final UAT Scripts.*** UAT Team comments on the original scripts can be found in ***Appendix 4-3 – UAT Team Comments on Scripts***. These comments, as well as comments made by UAT Team members during the facilitated session mentioned above provided the basis for making changes to the scripts. Two matrices documenting all changes made to the scripts (one responding to comments by the UAT Team, State staff or WDTIP technical experts before the facilitated session and one as a result of the facilitated session) were developed and are included ***Appendix 4-4 -- UAT Script Update Logs.***

4.2.5 Testing/Retesting and Regression Testing

Using the scripts they had validated, the UAT Team tested the WDTIP system in four separate cycles. The cycles included remote testing, two full rounds of script execution (the 94 main scripts), and regression testing. For remote testing, the UAT Team tested four specific scripts from their local sites. The WDTIP Team provided guidance, and the UAT Team reported their results via a conference call on the afternoon of April 5th, 2000. During their second visit to Sacramento (from April 10-20, 2000), the UAT Team tested all scripts twice (with the exception of the four remote testing scripts) and then executed 10 scripts that were identified as being representative of all scripts for regression testing.

During testing, the UAT Team was instructed to report incidents and issues as they occurred, and these incidents and issues were discussed as a group at a daily afternoon meeting with representatives from the WDTIP Implementation and Application Teams. As incidents and issues were reported, they were entered into the Project Tracking System by the WDTIP Team (see the ***4.2.6 Incident and Scenario Tracking and Reporting UAT Status*** subsection for more information on the incident and scenario tracking tools). During the afternoon meeting, the WDTIP Team asked the UAT Team to validate the accuracy of the descriptions and priority of the incidents and issues and classify them by type (enhancement, defect, etc.). For more information on testing cycles, please refer to the ***4.3 Testing Cycles*** subsection below.

4.2.6 Incident and Scenario Tracking and Reporting UAT Status

To effectively track incidents and issues that occurred during UAT testing and report on UAT status, the WDTIP Team used the following two tools: the Project Tracking System and the Scenario Tracking System.

4.2.6.1 Project Tracking System (PTS)

As mentioned above, incidents and issues that occurred from testing scripts were reported and entered into PTS. PTS is a tool used to track both issues and incidents that arise during the course of the WDTIP Project. An incident is defined (in the WDTIP **Configuration Management Plan** deliverable) as a program logic anomaly identified in the WDTIP Application during system and user acceptance testing. The primary purpose for incident tracking is to help monitor the progression of incidents through the Change Control Process and produce reports that provide information regarding status and assignment of incidents. Please refer to ***Section 8.1.1 Configuration Item Tracking System*** of the **Configuration Management Plan** document and the **Project Management Plan** document for more information on issue tracking**.**

4.2.6.2 Scenario Tracking System (STS)

The STS is a tool used to monitor the status of test scripts. The STS allows for the reporting and monitoring of scenarios, scripts and steps along with associated expected results. Test results (by step) were recorded in the STS to identify status of scenarios and scripts. System test progress was reported in the daily WDTIP status meetings using reports generated by this system.

Both the PTS and the STS were instrumental in the tracking, monitoring and reporting of incidents, issues and scripts, and in compiling the overall results of UAT. Please see the

5.0 UAT Results section for more information on the status of incidents and issues identified during UAT and the status (pass or fail) of the UAT scripts.

4.3 Testing Cycles

As mentioned above, the UAT Team tested scripts during four separate testing cycles: remote testing, two full rounds of script execution and regression testing. Below is a description of each of the different testing cycles, including which scenarios and scripts were tested and the number of batch loads and time clock advancements per cycle. For complete schedules of each of the testing cycles, including *order of scripts to be tested*, batch loads and time clock advancements, please see ***Appendix 4-5 – Script Testing Schedules***.

4.3.1 Remote Testing

To ensure connectivity and reasonable performance when navigating through screens, most of the UAT Team conducted remote testing at their local offices (as mentioned in the ***4.2.1 UAT Team*** subsection). Four scripts were chosen to ensure that counties had access to the system from their local sites and the system performed as expected at these sites. The scripts chosen tested system access, system navigation, on-line data display and the ability to utilize the update screens. The remote testing cycle included a single batch data load but did not contain any time clock advancements.

4.3.2 Testing and Retesting

Once in Sacramento, the UAT Team executed two complete cycles of 94 additional scripts to fully test the functionality of the system. Each testing cycle included four simulated time clock advancements, four separate batch data loads and six executions of the time clock calculation logic. Please see the ***5.5 Scenarios and Scripts*** subsection of the ***UAT Plan*** (a section of the **Integration/System Test Sign-off** deliverable) for more information regarding time clock advancements, batch data loads and time clock calculations. The first cycle was the initial testing cycle in which the testers executed scripts designed to test all aspects of the system including system navigation, system security, screen layout and data display, update screens functionality, time clock calculations and overall business functionality. As testers completed each script, they reported any incidents or issues as they occurred. These incidents and issues were discussed with representatives of the WDITP Implementation and Application Teams as a group each day and entered into the Project Tracking System.

The second cycle of testing was initiated to test several programming changes made to resolve incidents discovered during the initial round of testing. The UAT Team re-tested all 94 scripts to ensure that the fixes worked appropriately and to determine if any other incidents arose as a result of the program modifications. Once again the testers were instructed to log all incidents and issues as they occurred.

4.3.3 Regression Testing

Regression testing consisted of the execution of a set of 10 core scripts that were selected as they represented a broad spectrum of system functionality. Regression testing differs from retesting in that the latter involves retesting all scripts that were originally tested while regression testing involves testing only a core set of representative scripts. These

scripts were executed to ensure that all program changes migrated to the UAT environment worked as designed and did not adversely affect any other programming logic. This cycle of testing incorporated a single load of data and two separate executions of the time clock calculation logic. Three of the regression testing scripts were executed a second time due to data discrepancies. This testing also consisted of a single data load and two time clock calculations. Please see ***Appendix 4-5 – Script Testing Schedules*** for a list of the 10 scripts used for regression testing.

4.4 Acceptance Criteria

Acceptance criteria are criteria developed by the project sponsor that outlines acceptable UAT results. CDSS, in conjunction with the Health and Human Services Agency Data Center (HHSDC), developed criteria based on the business requirements identified during the Joint Requirements Planning (JRP) Session in October 1999. These requirements are outlined in the **Updated Business Requirements** deliverable. The Acceptance Criteria is included as ***Appendix 4-6 – UAT Acceptance Criteria.*** To ensure that testing covered the Acceptance Criteria, the WDTIP Implementation Team developed a table linking the criteria not only to the business requirements but also to the scripts and scenarios. The table is included as ***Appendix 4-7 – Acceptance Criteria, Scripts and Scenarios and Business Requirements Association Table.***

To successfully complete UAT, after execution each script had to be classified as passed or pending. For the UAT Team to classify a script as "pass," the expected results detailed on each of the steps of the script had to meet the actual results in the system. A script classified as "pending" meant that the UAT Team is waiting for an action to occur by an outside entity (either CDSS or HHSDC) before the script can be fully tested.

UAT could be successfully completed even if a script was classified as "fail" by a tester. This would happen in those instances where the failed script meets the criteria outlined by CDSS and HHSDC:

The status of all steps by script and scenario were tracked in the Scenario Tracking System. Please see the ***5.3 Script and UAT Sign-off*** subsection for the status of all UAT scripts.

5. UAT Results

This section details the UAT results, including the incidents found by testing cycle; the incidents by category (defect, enhancement and other) and by status (closed, future release, work in progress); and a summary of the script sign off and acceptance by CDSS.

5.1 UAT Results by Cycle

As mentioned previously, testers documented incidents found during each testing cycle, and the WDTIP Team entered these incidents into the Project Tracking System (PTS) and the Scenario Tracking System (STS). PTS allows the WDTIP Team to track the status of incidents as they move towards resolution. STS allows the WDTIP Team to track the status of scripts by associating those incidents with scenarios and scripts (down to the step level). The tables below depict the incidents found during each testing cycle by scenario and script. It is important to note that there is no table for regression testing because no incidents were found during that testing cycle. Additionally, there is a table included for UAT preparation because there were incidents found by the WDTIP Team while preparing for UAT that were logged as UAT incidents.

Table 5-1: UAT Preparation – Incidents by Scenario/Script

Scenario/Script	Associated Incident(s)
UAT Preparation	384, 385, 386, 388, 389, 390, 391, 392, 393, 394

Table 5-2: Remote Testing (Cycle 1) – Incidents by Scenario/Script

Scenario/Script	Associated Incident(s)
14/1	397, 402
Open Testing	445

Table 5-3: Testing/Retesting (Cycles 2 and 3) – Incidents by Scenario/Script

Scenario/Script	Associated Incident(s)	
	Cycle 2	Cycle 3
2/1	409	431
2/2	422	
3/1	408	
4/2	423, 426	
5/2	398	
5/3	399	
5/4		454
6/1	400	

Scenario/Script	*Associated Incident(s)*	
	Cycle 2	*Cycle 3*
8/5		439
9/10	411	
9/14	413	442
9/15		456
9/16	403	
9/21		457
9/39		443
9/47		458
9/49	412	444
9/50	406, 410	459
9/51	414	460
9/53	417, 419	
10/1		434, 437
10/2	401	440
10/4	407	
10/5		450
10/6	416	
11/1		455
11/2	420, 421	
Open Testing	415, 418, 424, 427, 429, 430	432, 433, 435, 436, 441, 451, 462, 463, 464, 465, 466, 467

Please see the ***5.2 UAT Incidents*** subsection for more information on the types of incidents found and their current status.

5.2 UAT Incidents

For the purpose of this document, incidents are defined as anomalies between WDTIP system functionality and UAT Team expectations of the WDTIP system. These anomalies could include system defects as well as enhancements. During the UAT testing process, the UAT Team was given the opportunity to verify that actual WDTIP system results met the expected results contained within the UAT scripts. The UAT Team was also given the opportunity to freely explore the system to test overall ease of use and to test any functionality without having to use the scripts. During script execution or free play, if a tester obtained a result that did not meet their expectations, they were instructed to document the unexpected result as an incident. These incidents were documented on Incident Identification Forms and then logged into the Project Tracking System by the WDTIP Team. This subsection will detail the results surrounding the incidents identified during UAT. Please see ***Appendix 5-1 – UAT Incident Report by Status*** for a report of all the UAT incidents by status (this report includes a long description of each incident).

5.2.1 Incident Count

During UAT, a total of 69 incidents were logged into the Project Tracking System. This total of 69 incidents includes 15 incidents that were combined with other incidents, either incidents found during UAT or incidents found prior to UAT. To determine the number of unique incidents identified during UAT, it was necessary to first subtract the combined incidents from the 69 original incidents. Of those 15 combined incidents, 11 of them were combined with incidents found during UAT and four of them were combined with incidents that were found prior to UAT. After subtracting the combined incidents from the 69 original incidents and adding back in the four combined incidents from before UAT, a total of 58 unique UAT incidents remain. These incidents are unique because no two of the 58 address exactly the same issue. The table below details the calculation for obtaining the total incidents identified during UAT.

Table 5-4: Calculation of Total Unique UAT Incidents

Total Incidents Entered During UAT	69
Less Incidents with Status of "Combined"	(15)
Plus Incidents Found Prior to UAT and Combined with UAT Incidents	4
Total Unique UAT Team Incidents	***58***

5.2.2 Incidents by Type

All of the UAT incidents logged by the WDTIP Team were categorized by type: Defect/Functionality, Enhancement, and Other. Incidents were categorized as "Defect/Functionality" when the cause of the incident was a result of system code not reflecting agreed upon system design. Incidents were categorized as "Enhancement" when the system performed as designed but did not meet user expectations. Enhancement incidents can be separated into two categories: policy enhancements and user request enhancements. Policy enhancements were identified when the system was functioning as designed but was not functioning in accordance with current Federal and/or State policy (i.e., new policy changes have been implemented since design or policy related functionality was overlooked during design). User request enhancements were requests for additions or modifications to "as designed" functionality (i.e., screen layout or enhanced navigation). Incidents categorized as "Other" were incidents that arose from the UAT testing process and include, but are not limited to, user error, incorrect test data and/or test script errors. A breakdown of the incidents by type is included in the table below.

Table 5-5: Incidents by Type

Type of Incident	*Number of Incidents*
Defect/Functionality	10
Enhancements	38
Other	10

Type of Incident	*Number of Incidents*
Total	***58***

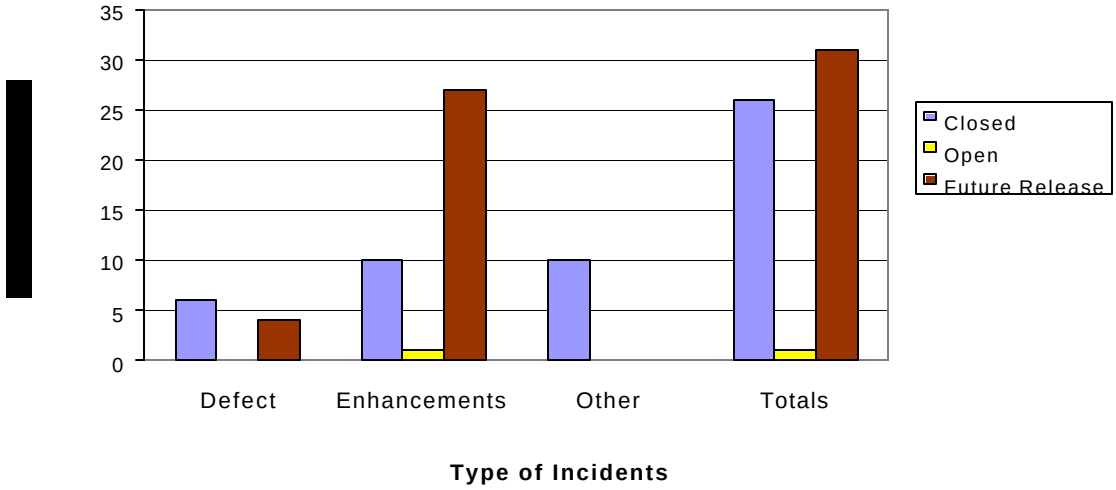
5.2.3 Incidents by Type and Status

Incidents were also assigned different statuses to indicate where in the resolution process the incident resided. At the conclusion of UAT, all incidents fell within three different statuses: Closed, Future Release, and Open. "Closed" incidents are incidents that have been resolved and require no further action. "Future Release" incidents are incidents that will be fixed in a future release of the application (after system rollout). "Open" incidents are incidents that are currently being fixed and will be tested and released prior to system rollout. The table and figure below depict the incidents by type and status at the end of UAT. A discussion of the incidents by status follows.

Table 5-6: UAT Incidents by Type and Status

Status	*Defect/ Functionality*	*Enhancements*	*Other*	*Totals by Status*
Closed	6	10	10	**26**
Open	0	1	0	**1**
Future Release	4	27	0	**31**
Totals by Type	***10***	***38***	***10***	***58***

Figure 5-1: UAT Incidents by Type and Status



5.2.3.1 Incidents with Closed Status

During the course of UAT, the WDTIP Team committed to responding to as many of the defects and simple enhancements that were identified by the UAT Team as possible. This included fixing system bugs and enhancing screens, and required testing the modified code in system test and then migrating the code back to the acceptance environment. This allowed the UAT Team to retest those areas. The UAT Team was given the opportunity to test 10 fixes associated with UAT incidents and, as a result, nine of those incidents

were subsequently closed (four of which were categorized as "Defect/Functionality" and five of which were categorized as "Enhancements"). The remaining incident was initially closed but was reopened when the UAT Team modified their original enhancement request. Since UAT, one incident (a defect) has been fixed, successfully system tested and closed.

Additionally, all of the incidents categorized as "Other" (which included mostly data or script errors) were immediately fixed and closed once identified. As shown in the table above, there were 26 incidents that were closed during the course of UAT.

5.2.3.2 Incidents with Incident Test Complete and Open Status

There is one UAT incident with the status "Open." An Open status indicates that the incident (an enhancement) is currently being worked on and will be system tested and closed prior to system rollout.

5.2.3.3. Incidents with Future Release Status

The remaining 31 incidents were categorized with a status of "Future Release." Future Release incidents are incidents (enhancements or defects) that will be resolved in a future release of the WDTIP system (after the initial system rollout at the beginning of June 2000). Additionally, since all Future Release incidents will be completed time and resource permitting, the UAT Team was asked to prioritize them based on importance to the users. Of the 31 Future Release incidents, the UAT Team only prioritized 28 since the WDTIP Team had already committed to fixing three prior to fixing any others that were CDSS policy changes. The table below illustrates the UAT Team's ranking of the 28 Future Release incidents. Table 5-8 provides a comprehensive list of all the Future Release incidents and highlights those that were not prioritized during the last day of UAT.

Table 5-7: UAT Team Ranking of Unique Future Release Incidents

Ranking	Incident #	Description
1	403	The system is counting months on the CalWORKs time clock for aid received by a minor parent (under the age of 18) erroneously.
2	411	The system is initiating and displaying time clocks for individuals being aided as a child.
3	465b*	Hierarchy of employed flag on USSO if multiple records are received in the same month.
4	456	More descriptive codes used on all calendar screens. For example, on TCAL, users would like to see and "S" if a month did not count because it was a state-only program.
5	465a*	System should not allow a user to add duplicate USSO records for a month when the only difference is the employed flag.
6	413	Add number of exception months to TSUM.
7	388/432**	Add more detailed field and screen help.

Ranking	Incident #	Description
8	436	Create an option to eliminate KSUM filter when requested by user.
9	417	Display extension months on KCAL
10	424	PSUM sort order on closed records
11	426/386 385/444**	Post Aid Child Care period issues – incorrect end date, generating on Homeless Assistance, and generating when there is an active program.
12	430	Add ISUM to F4 screen id list
13	464	Clarify error message #1150 on USSO
14	421/450**	Add edit process including a cascading effect when record is deleted
15	394	Search criteria retained in ISUM header
16	393/451**	DDET diversion flag
17	431	Date edit on UNCP
18	391	Format of extension months on PDET. Currently is XX/XX – should be X/X
19	412	Display county number on PSUM
20	467	Add TRAC to F4 screen id list
21	390	Add page numbers on detail screens
22	392	Modify Diversion Payment Date format on DDET
23	445	Remove F3 option from TRAC Main Menu

*The UAT Team determined that incident 465 should be split into two incidents. For prioritization purposes the first part of the incident was called 465a and the second part was called 465b. See Incident 465 in ***Appendix 5-1: UAT Incident Report by Status*** for details.

**Some unique incidents were combined for prioritization purposes because they would most likely be fixed at the same time as the others in the group.

Table 5-8: Future Release Incidents by Number

Future Release Incidents			
375*	392	421	445
376*	393 (451)**	424	450
377*	394	426	456
385	403	430	463***
386	411	431	464
388	412	432	465
390	413	436	467
391	417	444	

*These incidents were CDSS policy changes that were not prioritized by the UAT Team since the WDTIP Team had already committed to the fixes.

** Incident #451was originally prioritized by the UAT Team, but has since been combined with #393 *** Incident #463 was not originally prioritized but has been categorized as "Future Release".

5.3 Script and UAT Sign-off

A total of 98 scripts in 14 scenario areas were tested during the UAT process. At the end of UAT, 92 of the scripts passed and were signed off by all testers who completed the associated cycles (please see the ***4.2.1 UAT Team*** subsection for more information on participation by UAT Team member). One or more of the testers did not sign off on six of the scripts tested. The table below details the scripts that, at the conclusion of UAT, were not unanimously signed off, the number of testers that did not sign off on the scripts, the associated incident numbers that resulted in the scripts not being signed off and the status of the incidents. Incidents related to three of the scripts were also identified prior to UAT and are noted. Please see ***Appendix 5-2 UAT Script Sign-off Sheets*** for specific information regarding which UAT Team members signed off on which scripts.

Table 5-9: Scripts Not Signed-off

Scenario /Script	Testers Not Signing	Associated Incident Number	Incident Type and Description	Incident Status
4-2	1	426	Defect/Functionality Post Aid Child Care Period end date displaying incorrectly on PDET	Future Release
8-5	1	439	Enhancement CalWORKs 60 and WTW 18/24 time clocks initializing and ticking for minor parent (individual under the age of 18).	Combined with incident #376, which was entered prior to UAT. Incident #376 is a Future Release.
9-16	3	403	Enhancement CalWORKs 60 month clock initializing and ticking for minor parent (individual under the age of 18)	Future Release
9-50	5	406	Enhancement System is failing to count a month on the CalWORKs time clock in the incident where a client receives an under $10 grant in a month and a homeless assistance payment in the same month.	Combined with incident #375, which was entered prior to UAT. Incident #375 is a Future Release.

Scenario /Script	Testers Not Signing	Associated Incident Number	Incident Type and Description	Incident Status
10-1	1	437	Defect/Functionality Problem adding UNCP record.	Combined with incident #409, which was fixed and closed.
10-2	1	440	Enhancement Non California assistance is not counting on the TANF or CalWORKs time clocks for a minor parent (individual under the age of 18).	Combined with incident #377, which was entered prior to UAT. Incident #377 is a Future Release.

* Although script 10-1 was not signed off by all UAT Team members, the incident related to this script was fixed and system tested by the WDTIP Application Team and even re-tested by the UAT Team members during the course of UAT. During re-test, the system performed as designed and was, therefore, considered fixed and closed by the WDTIP Team. However, one tester did not sign off on script 10-1 as the tester felt additional testing might be required to ensure system performance in the update screens is consistent with system design.

5.4 UAT Results Conclusion

Although not all of the UAT Team members signed off on all scripts at the conclusion of UAT, UAT Team members accepted the overall system design, functionality and performance. Team members determined that the system met users' expectations and business needs and is acceptable "as-is" for system rollout. The UAT Team understood that the fixes or enhancements would not be completed prior to system rollout, June 5, 2000. Additionally, the UAT Team members are aware that incidents requiring further CDSS policy review will not be completed prior to system rollout. Future Release incidents that require supporting impact analysis may be subject to the Project's established Configuration Control Board (CCB) review processes.